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AMSAT NEWS SERVICE
ANS-058

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

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ANS-058 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 Feb 27

SanoSat-1 has been assigned Nepal-OSCAR 116 (NO-116)

On January 13, 2022, the SanoSat-1 satellite was launched on a Falcon 9 launch vehicle from the Kennedy Space Center in Florida. Developed by ORION Space, AMSAT-Nepal, and AMSAT-EA, the satellite carries a radiation sensor payload and provides a store and forward capability.

At the request of AMSAT-Nepal, AMSAT hereby designates SanoSat-1 as Nepal-OSCAR 116 (NO-116). We congratulate AMSAT-Nepal and their partners, thank them for their contribution to the amateur satellite community, and wish them continued success on this and future projects.

[ANS thanks Drew Glasbrenner, KO4MA, AMSAT VP Operations/OSCAR Number Administrator, for the above information]

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The 2022 AMSAT President's Club coins have arrived!
To commemorate the 50th anniversary of its launch on
October 15, 1972, this year's coin features
an image of AMSAT-OSCAR 6.
Join the AMSAT President's Club today and help
Keep Amateur Radio in Space!

https://www.amsat.org/join-the-amsat-presidents-club/

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smaller laser arrays could find use in applications where conventional electric and chemical rockets are now used. More information at: https://bit.ly/3Il7Mi4

[ANS thanks SpaceDaily.com for the above information]

Northrop Grumman Sends NASA Science, Cargo to International Space Station

Northrop Grumman's Antares rocket liftoff from pad 0A at 12:40 p.m. EST from NASA's Wallops Flight Facility in Virginia, on Feb. 19, 2022. Northrop Grumman's Antares rocket liftoff from pad 0A at 12:40 p.m. EST from NASA's Wallops Flight Facility in Virginia, on Feb. 19, 2022. The Cygnus spacecraft, carrying 8,300 pounds of science investigations and cargo, is scheduled to arrive at the space station on Monday, Feb. 21. A fresh supply of 8,300 pounds of scientific investigations and cargo launched from NASA's Wallops Flight Facility in Virginia at 12:40 p.m. EST on Saturday, Feb. 19, aboard a Northrop Grumman Cygnus resupply spacecraft, and is now traveling to the International Space Station. The Cygnus spacecraft, which was launched on an Antares rocket, is scheduled to arrive at the space station around 4:35 a.m. on Monday, Feb. 21. NASA Television, the NASA app, and agency's website will provide live coverage of the spacecraft's approach and arrival beginning at 3 a.m. NASA astronauts Raja Chari and Kayla Barron will capture Cygnus with the station's robotic Canadarm2 upon its arrival. The spacecraft will then be installed on the Earth-facing port of the station's Unity module. This is Northrop Grumman's 17th contracted resupply mission under the second Commercial Resupply Services contract with NASA. The delivery includes critical materials to support dozens of the more than 250 science and research investigations occurring during NASA's Expedition 66 mission aboard the space station. Details of the mission at https://go.nasa.gov/3HouZP6. More of the article above at https://go.nasa.gov/3BXyXx5

[ANS thanks Robert Margetta and NASA News for the above information]

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amateurs operating in schools and allowing students to interact with astronauts and cosmonauts aboard the International Space Station. The downlink frequency on which to listen is 145.800 MHz worldwide.

Carter G. Woodson Middle School, Hopewell, VA, telebridge via K6DUE. The ISS callsign is presently scheduled to be NA1SS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Thomas Marshburn KE5HOC. Contact is go for: Mon 2022-02-28 14:43:53 UTC 36 deg
Watch for Livestream at: https://youtu.be/KmFtTluF3aQ

The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors for the above information]

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[ANS thanks Paul Overn, KE0PBR, AMSAT rover page manager, for the above information]

Hamfests, Conventions, Maker Faires, and Other Events

AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

AMSAT Ambassador Clint Bradford, K6CLS is making one of his outstanding Getting Started club presentations on Zoom, March 2 at 7:00PM Eastern/4:00 PM Pacific. Clint has added a new feature, he is being joined during the presentation by two special guests who will help explain SSB operations on linear satellites and will provide a live pass demonstration. Contact Clint for the latest information on his presentation schedule for the Getting Started With Amateur Satellites at 951-533-4984 or send a request at his website: https://bit.ly/3K0rEXY

+Charlotte NC Hamfest March 11-12
(AMSAT Ambassador Phillip Jenkins, N4HF)
Forum & demo(s) are Saturday only
Cabarrus County Arena & Events Center
4551 Old Airport Rd, Concord, NC 28025
https://charlottehamfest.org/
(note: 2 day hamfest, but only open 4 hours on Friday the 11th.)

+Raleigh NC Hamfest April 16
(AMSAT Ambassador Phillip Jenkins, N4HF)
(info table and demos; possible forum, but not likely at this point)
Jim Graham Building □ NC State Fairgrounds
4285 Trinity Rd, Raleigh, NC 27607
https://www.rarsfest.org/

Scheduled Events with AMSAT involvement:

+ CubeSat Developers Workshop
April 26□28, 2022
San Luis Obispo, CA

+ Hamvention 2022
May 20, 2022 to May 22, 2022
Greene County Fairgrounds and Expo Center
210 Fairground Road
Xenia, Ohio 45385
https://www.hamvention.org

+ 2022 Rocky Mountain ARRL Division Convention
October 7, 2022 - October 9, 2022
Event Center at Archer
3921 Archer Pkwy
Cheyenne, Wyoming 82007
https://wyhamcon.org/site.

[ANS thanks AMSAT Ambassadors Clint Bradford, K6CLS and Phillip Jenkins, N4HF as well as Paul Overn, KE0PBR, AMSAT Events page manager, for the above information]

Satellite Shorts From All Over

+ {Note that Shorts are always a single paragraph, no headlines}

+ From riverbed to crawlerway, the path to space goes through a unique Alabama resource. Alabama river rocks currently pave the path for rockets on the crawlerway at NASA□s Kennedy Space Center in Florida. This 4.2 mile road of rocks is crucial for launching NASA□s missions, specifically the upcoming launch of Artemis I, the uncrewed test flight of NASA□s Space Launch System (SLS) and Orion Spacecraft. A massive pair of machines called crawler-transporters have carried integrated rockets and spacecraft to Pads 39A and 39B for more than 50 years at Kennedy. Their initial design called for asphalt roads, but engineers quickly encountered issues. Asphalt couldn□t handle the weight of the 6.65-million-pound crawler on its own, much less with the weight of a rocket added to it. The asphalt also proved too sticky and therefore would not allow the crawler-transporter to turn properly, causing damage to its roller bearings. NASA conducted a study to find a material that would allow the crawler to make a proper turn and hold the weight required. The results: river rock. More at http://go.nasa.gov/3K0r3We [ANS thanks Jennifer Harbaugh of NASA for the above information]

+ Rocket Lab to debut new launch pad on next mission Rocket Lab□s next mission, targeted for no earlier than Feb. 28, will be the first from a new launch pad at the company□s private spaceport in New Zealand, an addition officials said could double the flight rate of Electron launchers. The new launch pad, named Launch Complex 1B, lies 383 feet (117 meters) from Launch Complex 1A, the pad Rocket Lab has used for all 23 of its Electron rocket missions to date, according to a company spokesperson. More at https://bit.ly/3LUMBW6 [ANS thanks Stephen Clark of Spaceflight Now for the above information]

+ To survive frigid temperatures, spacecraft often use radioisotope heaters. Masten Space□s under-development NITE system is an alternative that uses the exothermic oxidation of metals with excess propellant to produce power and heat. They claim it saves ~$50 million over nuclear solutions and ~$10 million in reduced launch mass when compared to batteries. The project is partially funded through a 2020 NASA Tipping Point award. More information is avalable at: https://bit.ly/3BOVtbn. [ANS thanks The Orbital Index for the above information]

+ESA is soliciting ideas and use cases for their proposed commercial lunar communication and navigation satellite network, which promises to allow for cheaper missions by providing shared infrastructure The proposale and timeline are available at: https://bit.ly/3pjcF3H. [ANS thanks The Orbital Index and ESA for the above information]

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Jack Spitznagel, KD4IZ

kd4iz at arrl dot org